#### Curriculum vitae



Name: Dr. HariOm Singh Designation: Scientist E

**Division:** Molecular Biology, ICMR-NITVAR,

Plot No 73, G'-Block, MIDC Rd, MIDC, Bhosari, Pune, Pimpri-Chinchwad, Maharashtra 411026

**DOB:** 01 March 1978

Email ID: hsingh@nariindia.org/hariomsgpgims@gmail.com

Area of Interest: Host Genetics, Pharmacogenomics, Genetic variability and disease

susceptibility

### **Awards and Honours**

NIH Office of AIDS Research (OAR) Training Fellowship Award, 2018

Young Scientist Award- ICIPMBS-2018

#### Brief about the work of scientist

I am working on Response to Radiochemotherapy among cervical cancer patients to identify the Biomarker to predict the radio chemo sensitivity or response to treatment in CC patients by examining the genetic and epigenetic expression pattern of EMT, Autophagy and circRNA-related genes using sequencing and methylation-specific PCR through bisulfite modification/ ChiPseq and RT-PCR/NGS and ELISA

I am also working on Response to Cardiac therapy among patients with cardiac injuries to find predictor for Treatment Response Variation and Early indicators for Cardiovascular Disease Diagnosis among patients of cardia injuries by examining the genetic and epigenetic expression pattern of Autophagy, Telomerase function and endothelial activation, DME, and transporter-related genes using global proteomics approach/genomics approach.

I look at the genetic and epigenetic variations of (Apo family of lipoprotein, Lipid Metabolizing transporter genes etc) in Comorbidities conditions of ART such as HIV-associated lipodystrophy/dyslipidemia, TDF and TAF -related renal dysfunction and to address the pathogenesis and find out the predictor for severity using Sequencing/NGS, RT-PCR/ and microarray.

I am also working on host genetic factors and COVID-19 disease progression to find out quantitative predictors/prognostic tool for adverse clinical outcomes and hospitalization required by examining the genetic variation and expression pattern of Cellular factors, Immune associated and inflammation -related genes using Sequencing/NGS, RT-PCR and ELISA.

Likewise, I look the role inflammatory pathway (Cytokines-MMPs) genes in HIV-associated neurocognitive disorder (HAND) to address the pathogenesis using PCR, sequencing, and ELISA. Likewise, I look at the role of host genes (AIDS Restriction factors- APOBEC, TRIM5 $\alpha$ , BST2, MBL) in HIV infected individuals to address the HIV vulnerability and disease progression. I look at the genetic and epigenetic variations of drug metabolizing enzymes, transporters, and receptor genes in drug responders and non-responders to find the predictor for sensitivity of drug. Comparative analysis of host related genes among patients with neurological disorders using NGS/sequencing, RT-PCR/ELISA.

Additionally, my lab is involved in routine activities like CYP2B6 genotyping test to know the status of drug metabolizers for Efavirenz regimen (drugs involved with 8-10% Hepatotoxicity, 25-70% Neuropsychiatric toxicity), which are done upon request from the clinician. Likewise, it also includes HLA B57:01 allele testing to know the presence of the 01 allele. 01 allele is associated with Abacavir (ABC) - induced hypersensitivity.

In addition, I am involved in teaching the role of pharmacogenomics in the development of adverse effects of ART regimen, the development of adverse effects of cardiac therapy, and the development of adverse effects of radiochemotherapy. Role of host genetic factors in HIV acquisition and disease progression, COVID-19 disease progression & post-COVID-19 complications, cervical cancer progression.

# **Work Experience**

Work		Post Held	Employer	Duration	
Experience				From	То
Research Development	&	Scientist E	ICMR-NARI, GOI	01 September 2023	Till date
Research Development	&	Scientist D	ICMR-NARI, GOI	01 September 2019	31 August 2023
Research Development	&	NIH-Fellow	State University of New York, Buffalo, USA	March 2019	October 2019
Research Development	&	Scientist C	ICMR- NARI, GOI	01 September 2015	31 August 2019
Research Development	&	Scientist B	ICMR- NARI, GOI	August 2010	31 August 2015
Research Development		ICMR-Research Associate	SGPGIMS, Lucknow	Feb 2010	July 2010

## **Ongoing and completed projects (List of Grant Received)**

Sr.No.	Title of Project	Duration	Funding	Role	Ongoing/compl
			Agency		eted
1	Comparative analysis of	2024-2027	ICMR	P.I	Ongoing
	genetic variation and				
	expression of Apo family of				
	lipoprotein, lipid				
	metabolizing enzyme and				
	transporter genes between				
	HIV-associated				
	lipodystrophy patients				
	taking PIs with and without				
	the history of receiving				

	stavudine or zidovudine				
	based regimen  Comparative analysis of	2021-2024	ICMR	P.I	Ongoing
	genetic variation and				
	expression of Apo family of lipoprotein, lipid				
	metabolizing enzyme and				
	transporter genes between				
	HIV-associated				
	lipodystrophy patients				
	taking PIs with and without				
	the history of receiving				
	stavudine or zidovudine				
	based regimen  Comparative analysis of	2021-2024	ICMR	P.I	Ongoing
	Host factors among	2021-2024	ICIVIK	F.1	Oligollig
	individuals with novel				
	Coronavirus infection				
4	Study of genetic variation	2021-2024	Intramural	P.I	Ongoing
	and expression of drug				
	metabolizing enzyme,				
	transporter and				
	Apolipoprotein genes				
	between TDF and TAF -				
	related renal dysfunction among patients of HIV -				
	hepatitis B co-infection				
	Genetic variation of Drug	2021-2024	Intramural	P.I	Ongoing
	metabolizing enzyme genes				
	in HIV-infected individuals				
	on EFV 600 mg containing				
	ART				
	Comparative analysis of	March 2019	NIH-CRDF-	P.I	Completed
	expression pattern of Apo	to October	USA		
	family of lipoprotein genes among patients with HIV-	2019			
	associated lipodystrophy				
	from Indian and United				
	States HIV patient cohorts				

7	Genetic Variants of Matrix	2013 -2017	ICMR	P.I	Completed
	Metalloproteinase Enzyme				
	in HIV-related Neurological				
	disease				
8	Genetic susceptibility of	2014 -2018	ICMR-NARI	P.I	Completed
	AIDS Restriction genes in		Intramural		
	HIV infected Individuals				
	naive to ART				
9	Genetic susceptibility of	2014 -2018	ICMR-NARI	P.I	Completed
	Drug Metabolizing Enzyme		Intramural		
	genes in Patients with ARV-				
	associated Hepatotoxicity				

# Conference/Training/Workshop Attended

Conferences/Trainings/Workshops	1)40 <sup>th</sup> National conference of the Indian society for study of
Attended	sexually transmitted diseases and AIDS (ASTICON 2016)
	scheduled to take place from November 25th to 27th, 2016 in
	Bhopal, MP
	2) HIV Congress 2020 (April), 6 <sup>th</sup> and 7 <sup>th</sup> April in Konkan room,
	Taj Lands Mumbai, India
	3) Revolutionize cell line development & Engineering to improve
	product quality, reduce time lines & increase titers at Park central
	Hotel, San Francisco, CA, June 18-20,2019
	4) Structure Biology Related to HIV/AIDS at NIH on June 27-28,
	2019 at Natcher conference center Bethesda, Maryland, US
	5) Meeting on Microbiome at Cold Spring Harbor Laboratory,
	New York, July 18-21,2019

# **Number of publications**

Published Papers: 65, Book chapter: 2, Sequence Submitted: 1 List of publications

- 1. **Singh H,** Shyamveer, Jori C, Mahajan SD, Aalinkeel R, Kaliyappan K, Bhattacharya M, Parvez MK, Al-Dosari MS. Role of APOC3 3238C/G, APOB 12669G/A and SCARB1 1050C/T polymorphisms, their expression in patients of HIV-associated lipodystrophy. Heliyon. 2024 May 1;10(9):e30519. (**IF: 4.00**)
- 2. **Singh H,** Nair A, Mahajan SD. Impact of genetic variations of gene involved in regulation of metabolism, inflammation and coagulation on pathogenesis of cardiac injuries associated with COVID-19. **Pathol Res Pract**. 2024 Sep 27;263:155608. (IF:2.9)
- 3. Shyamveer, Antony Jenitha A, Bhattacharya M, Mahajan SD, Ali N, Rashid Khan M, **#Singh H.** Correlation of APOE polymorphism, expression, and plasma levels with cardiac comorbidities

- among lipodystrophy in HIV-infected patients. **Clin Chim Acta**. 2024 Sep 21;565:119969. (IF: **6.3**)
- 4. Singh H, Dhotre K, Shyamveer, Choudhari R, Verma A, Mahajan SD, Ali N. ABCG2 polymorphisms and susceptibility to ARV-associated hepatotoxicity. Mol Genet Genomic Med. 2024 Mar;12(3):e2362. (IF: 2.6).
- 5. Singh H, Shyamveer, Mahajan SD, Aalinkeel R, Kaliyappan K, Schwartz SA, Bhattacharya M, Parvez MK, Al-Dosari MS. Identification of novel genetic variations in ABCB6 and GRN genes associated with HIV-associated lipodystrophy. **Clin Chim Acta.** 2024 Mar 15;556:117830. (IF: **6.3**)
- 6. Shyamveer, Khan AA, **Singh H**. Effect of genetic variations in drug transporters, metabolizing enzyme and regulatory genes on the development of HIV-associated lipodystrophy. **J Gene Med**. 2023 Mar 2:e3493. (**IF: 4.152**)
- 7. **Singh H,** Dhotre K, Mahajan SD. Role of APOC3 3238C/G polymorphism in HIV-associated neurocognitive disorder. **Microb Pathog**. 2023 Apr 10;179:106107. (**IF: 3.738**).
- 8. **Singh H,** Jori C, Shyamveer, Mahajan SD, Aalinkeel R, Kaliyappan K, Schwartz S A. MTP 493G/T, ABCG2 34G/A polymorphisms, its expression in HIV associated lipodystrophy patients. **Frontiers in Cardiovascular Medicine -** Lipids in Cardiovascular Disease: 30 May 2023, Volume 10-2023(**IF: 6.05**)
- 9. **HariOm Singh,** Dharmesh Samani, Supriya D Mahajan. ABCB1 polymorphism in HIV-infected individuals taking anti-retroviral drugs. **Frontiers in phaarmacology** (**IF: 5.05**).
- 10. Namdev G, Choudhari R, Shyamveer, Khan AA, **Singh H** #. Impact of inflammatory cytokine and adipokine gene variations in development of HIV-associated Lipodystrophy. **J Gene Med.** 2023 Apr 26:e3512. (**IF: 4.152**)
- 11. **Singh H**, Dhotre K. Role of MMP-13-77A/G polymorphism in HIV-associated neurocognitive disorders patients. **Microb Pathog**. **2022** Aug 30:105740. (**IF: 3.738**).
- 12. **Singh H,** Samani D. TLR3 polymorphisms in HIV infected individuals naïve to ART. **Curr HIV Res. 2022** Sep 8. doi: 10.2174/1570162X20666220908105434. (**IF: 1.581**)
- 13. Pathak P, Kumar V, Khalilullah H, Grishina M, **Singh H**, Verma A. Debelalactone Prevents Hepatic Cancer via Diminishing the Inflammatory Response and Oxidative Stress on Male Wistar Rats. **Molecules**. **2022** Jul 14;27(14):4499 (**IF: 4.148**)
- 14. Yadav E, Yadav P, Khan MMU, **Singh H**, Verma A. Resveratrol: A potential therapeutic natural polyphenol for neurodegenerative diseases associated with mitochondrial dysfunction. **Front Pharmacol.** 2022 Sep 16;13:922232. (**IF: 5.81**). (Citation:2)
- 15. **Hari Om Singh**, Vivek Gupta and Amita Singh. Genetic Variations of V3 and C3 regions in gp120 protein of HIV-1 env gene. **J Dement** 2022, Vol 6(1): 116 (**IF**:0.05)
- 16. **Singh H**, Jakhar K, Nema V, Krishnaraj A, Choudhari R. Effect of miRNAs, Proinflammatory Cytokines and ACE2 in COVID-19 Pathophysiology. **Coronaviruses**, 2021, 2,1-0 (**IF: 0.81**)
- **17. Singh H**, Samani D, Jadhav S. KDR polymorphism (1192G/A, 1719A/T) and modulation of ARV drug-induced hepatotoxicity. **Microb Pathog**. 2021 Dec;161(Pt A):105243. (**IF: 3.738**) (**Citation:1**)
- **18.** Maan HS, Chaurasia D, Kapoor G, Dave L, Siddiqui A, Pal S, **Singh HO**, Biswas D, Chowdhary R. Intestinal viral infections of nSARS-CoV2 in the Indian community: Risk of virus spread in India. **J Med Virol**. 2022 Apr;94(4):1315-1329. (**IF: 20.693**)
- 19. **Singh H**, Jadhav S, Arif Khan A, Aggarwal SK, Choudhari R, Verma S, Aggarwal S, Gupta V, Singh A, Nain S, Maan HS. APOBEC3, TRIM5α, and BST2 polymorphisms in healthy individuals

- of various populations with special references to its impact on HIV transmission. **Microb Pathog.** 2022 Jan;162:105326. (IF: **3.738**) (**Citation:2**)
- **20.** Sumitra Nain, **HariOm Singh**, 1, 3, 4 -thiadiazole scaffold: As Anti-Microbial Agents. **Pharmaceutical chemistry journal** 2021 (**IF:0.868**)
- 21. **Singh H#,** Jadhav S, Chauware V. Impact of MBL-2 coding region polymorphism on modulation of HAND and HIV-1 acquisition. **Microb Pathog**. 2021 Sep 1;105163. **(IF: 3.738)** (**Citation:1)**
- **22.** Arif Khan, Tashfeen, Muhammad Bilal, **Singh H.** Microbiota, probiotics and respiratory infections: the three musketeers can tip off potential management of COVID-19". **Am J Transl Res** 2021;13(10):10977-10993 (**IF: 4.06**) (**Citation:6**)
- **23.** Khan AA, Sirsat AT, **Singh H**#, Cash P. Microbiota and cancer: current understanding and mechanistic implications. **Clin Transl Oncol.** 2021 Aug 13:1-10.(**IF: 3.405**) (**Citation:8**)
- **24.** Singh H#, Singh A, Khan AA, Gupta V. Immune mediating molecules and pathogenesis of COVID-19-associated neurological disease. **Microb Pathog**. 2021 Sep; 158:105023. (**IF: 3.738**). (Citation:21)
- **25. Singh H**#, Chauware V, Jakhar K. Comparative Occurrence of TLR3 and TLR7 Polymorphisms among healthy individual of various population. **Current Pharmacogenomics and Personalized Medicine.** Volume 18, Issue 1, 2021 (IF: 1.14)
- 26. **Singh H#**, Lata S. Occurrence of DAT1 (VNTR) Polymorphism in Individuals with HIV infection. **Current Pharmacogenomics and Personalized Medicine.** 2021, DOI: 10.2174/1875692118666210421104202 (**IF: 1.14**)
- 27. **Singh H#,** Choudhari R. Role of Host Genetic Factors in Patients with Astrocytomas. **Biotechnol Biomater** 2021, 2:1 (**IF: 1.75**)
- 28. **Singh H**#, Choudhari R. Novel Drug Delivery Formulations of Herbal Bioactive Molecules. **Indian Journal of Novel Drug Delivery** 13(1), Jan-Mar, 2021, 10-17 (**IF: 0.125**)
- 29. **Singh H**#, Choudhari R, Nema V, Khan AA. ACE2 and TMPRSS2 polymorphisms in various diseases with special reference to its impact on COVID-19 disease. **Microb Pathog**. 2021 Jan; 150:104621. (**IF: 3.738**) (Citation:69)
- 30. **Singh H#**, Lata S, Choudhari R, Dhole T.N. Prevalence of *ABCC3* 1767G/A polymorphism among patients with antiretroviral -associated hepatotoxicity. **Mol Genet Genomic Med**. 2020;00:e1124 (IF: **2.473**) (Citation:1)
- 31. **Singh H**, Samani D, Aggarwal S. TLR7 Polymorphism (rs179008 and rs179009) in HIV-Infected Individual Naïve to ART. **Mediators Inflamm.** 2020 May 20;2020:6702169. (**IF: 4.711**) (**Citation:4**)
- 32. **Singh H#,** Nain S, Krishnaraj A, Lata S, Dhole TN. Genetic variation of matrix metalloproteinase enzyme in HIV-associated neurocognitive disorder. **Gene.** 2019 May 25; 698:41-49. (**IF: 3.68**) (**Citation:4**)
- 33. **Singh H**, Jadhav S, Samani D, Nain S. Tissue Inhibitor of Metalloproteinase-2 Polymorphisms and Risk for HIV-Associated Neurocognitive Disorder. **Mediators Inflamm**. 2019 May 28;2019:8278095. (**IF: 4.711**)
- 34. **Singh HO**, Maan HS, Dhole TN. Gene Silencing: A Novel Approach and Suppression of HIV-1 Gene. **J Mol Genet Med** 2019 April 22: 13: 420 (**IF: 0.0**)

- 35. **Singh H#,** Lata S, Dhole TN, Gangakhedkar RR. Occurrence of CYP2B6 516G>T polymorphism in patients with ARV-associated hepatotoxicity. **Mol Genet Genomic Med.** 2019 Apr;7(4):e00598 (**IF: 2.473**) (Citation:4)
- 36. **Singh HO**, Jadhav S, Samani D, Dhole TN. Polymorphisms in miRNAs Gene (146a, 149, 196a) and Susceptibility to ARV-associated Hepatotoxicity. **Curr Genomics**. 2019 Feb;20(2):134-150. (**IF: 2.236**)
- 37. **Singh H**, Samani D, Nain S, Dhole TN. Interleukin-10 polymorphisms and susceptibility to ARV associated hepatotoxicity. **Microb Pathog**. 2019 Aug;133:103544. (**IF: 3.738**) (**Citation:4**)
- 38. **Singh H**#, Nambiar N, Samani D, Gangakhedkar RR. Occurrence of Interleukin-2 (330 G/T) Promoter Polymorphism in ARV associated hepatotoxicity. **Curr Mol Med**. 2019 Apr 10. doi: 10.2174/1566524019666190411093451. (**IF: 2.222**)
- 39. **Singh H#**, Gangakhedkar RR. Occurrence of APOBEC3G variations in West Indian HIV patients. **Microb Pathog**. 2018 Jun 2; 121:325-330. (**IF: 3.738**) (**Citation:4**)
- 40. **Singh H#**, Lata S, Gangakhedkar RR. Prevalence of CYP2D6\*4 1934G/A Polymorphism in Western Indian HIV patients. **APMIS**. 2018 Nov;126(11):842-851(**IF**: 3.26) (Citation:1)
- 41. **Singh H#**, Samani D, Nema V, Ghate M.V, and Gangakhedkar R,R. IL-1RN and IL-1β Polymorphism and ARV-Associated Hepatotoxicity. **Mediators of Inflammation.** 2018 Apr 8;2018:4398150 (**IF: 4.711**) (Citation:9)
- 42. **Singh H**#, Samani D, Nambiar N, Ghate MV, Gangakhedkar RR. Effect of matrix metalloproteinase-21 (572C/T) polymorphism on HIV-associated neurocognitive disorder. **APMIS.** 2018 Apr; 126(4):329-336. (**IF: 3.26**) (**Citation:3**)
- 43. **Singh H**#, Samani D, Nambiar N, Ghate MV, Gangakhedkar RR. Prevalence of MMP-8 gene polymorphisms in HIV-infected individuals and its association with HIV-associated neurocognitive disorder. **Gene.** 2018 Mar 10;646:83-90 (**IF: 3.68**) (**Citation:11**)
- 44. **Singh H**# and Nain S. Matrix Metalloproteinases Enzyme and Risk for HIV-Associated Neurocognitive Disorders. **Austin Journal of HIV/AIDS Research.** January 30, 2018 (IF:0.0)
- 45. **Singh H**#, Samani D, Ghate MV, Gangakhedkar RR. Impact of cellular restriction gene (TRIM5α, BST-2) polymorphisms on the acquisition of HIV-1 and disease progression. **J Gene Med**. 2018 Feb; 20(2-3):e3004. (**IF: 4.152**) (**Citation:10**)
- 46. **Singh H**#, Lata S, Nema V, Samani D, Ghate M, Gangakhedkar RR. CYP1A1m1 and CYP2C9\*2 and \*3 polymorphism and risk to develop ARV-associated hepatotoxicity and its severity. **APMIS.** 2017 Jun; 125(6):523-535. (**IF: 3.26**) (**Citation:5**)
- 47. **Singh H**#, Marathe S D, Nain S, Samani D, Nema V, Ghate M V, Gangakhedkar R . Promoter polymorphism MMP-1 (-1607 2G/1G) and MMP-3 (-1612 5A/6A) in development of HAND and modulation of pathogenesis of HAND. **J Biosci.** 2017 September, 42, 481–490 (**IF: 1.826**) (**Citation:5**)
- 48. **Singh HO**#, Lata S, Angadi M, Bapat S, Pawar J, Nema V, Ghate MV, Sahay S, Gangakhedkar RR. Impact of GSTM1, GSTT1 and GSTP1 gene polymorphism and risk of ARV-associated hepatotoxicity in HIV-infected individuals and its modulation. **Pharmacogenomics J**. 2017 Jan; 17(1):53-60. (**IF: 3.55**) (**Citation:19**)

- 49. Vijay Nema, **Hari Om Singh**. Host Pharmacogenomics: to be Remembered while Planning a Cure for HIV. **BAOJ Hiv** 2017 3:1 (IF:0.0)
- 50. **Singh H**#, Marathe S, D, Nain S, Nema V, Ghate M. V, Gangakhedkar R, R. Impact of variants of MMP-7(-181A>G) gene in susceptibility to development of HAND and its severity. **APMIS**. 2016 Nov;124(11):966-972 (**IF: 3.26**) (**Citation:4**)
- 51. **HariOm Singh**#, Shruti D Marathe, Vijay Nema, Manisha Ghate, Raman R.Gangakhedkar. Genetic variation of MMP-2 & MMP-9 polymorphism in susceptibility to development of HAND and its severity. **J Gene Med.** 2016 Sep; 18(9):250-7. (**IF: 4.152**) (Citation:4)
- 52. **HariOm Singh**#, Shruti D Marathe, Sumitra Nain, Vijay Nema, Manisha V Ghate, Raman.R.Gangakhedkar. APOBEC3B deletion impacts on susceptibility to acquire HIV-1 and its advancement among Individuals in Western India. **APMIS.** 2016 Oct;124(10):881-7 (**IF: 3.26**) (Citation:9)
- 53. **HariOm Singh**#, Shruti Marathe, Sumitra Nain, Mansa Angadi, Shradha Bapat, Jyoti Pawar, Vijay Nema, Manisha Ghate, Seema Sahay, R.R.Gangakhedkar .Coding region variant 186H/R in Exon 4 of APOBEC3G among individuals of Western India. **APMIS.** 2016 May;124(5):401-5 (**IF: 3.26**)
- **54.** Supriya D. Mahajan\*, Asmita Gaekwad, Jyoti Pawar, Srikanth Tripathy, Manisha Ghate, Jayanta Bhattacharya, **HariOm Singh**, Stanley A. Schwartz, Ramesh Paranjape and Raman Gangakhedkar. Cardiac Morbidity in an HIV-1 Lipodystrophy Patient Cohort Expressing the TNF-α-238 G/A Single Nucleotide Gene Polymorphism. **Curr HIV Res.** 2015; 13(2):98-108. (**IF: 1.581**) (**Citation:5**)
- 55. Sumitra Nain,\* Anu Sharma, **Hariom Singh**, Sarvesh Paliwal. Recent Advances in use of Semicarbazones as Anticonvulsant Agents: A Review. **J. Biomed. Ther. Sci.** 2015, 2(1), 1-7 (IF: **2.0**) (**Citation:8**)
- 56. **Hari Om Singh**#, Amita Singh, TN Dhole and Sumitra Nain. Effect of Ormeloxifene for Management of Dysfunctional Uterine Bleeding. **Biochem Physiol 2015**, 4:3
- 57. **HariOm Singh#**, Amita Singh, TN Dhole and Sumitra Nain. Factor associated to Bacterial Vaginosis in Nonpregnant women of North Indian population. **J Biotechnol Biomater** 2015, 5:3
- **58. Hari OS#,** Sonali G and Sumitra N. Awareness and Trends of Blood Cholesterol and Susceptibility to Develop Heart Disease. **Adv Genet Eng** 2015, 4:3
- 59. Gangwar R, Mittal B. Srivastava Shuti, Singh H, Mittal R Genetic Variants of DNA Repair Gene XPC Modulating Susceptibility to Cervical Cancer in North India. Onco Res 2010; 18:1-100. (IF: 4.83) (Citation:8)
- 60. Singh H, Jain M, Mittal B. TGF-β1 (-509C/T) Gene Polymorphisms and Susceptibility to Cervical Cancer.Onco Res. 2009; 18(1):41-5. (IF: 4.83) (Citation:8)
- 61. **Singh H,** Sachan R, Devi S, Pandey S N, Mittal B. Association of GSTM1, GSTT1 and GSTM3 gene polymorphisms and susceptibility to cervical cancer in North Indian population. **Am J Obstet Gynecol.** 2008; 198:303-6. (**IF: 9.491**) (**Citation:102**)

- 62. **Singh H,** Sachan R, Geol H, Mittal B. Genetic Variations in Interleukin-1 receptor antagonist and Interleukin-1β genes and cervical cancer. **British J. Obstetrics and Gynecology** 2008; 115:633–638. **(IF:7.331)** (**Citation:27**)
- 63. **Singh H,** Sachan R, Jain M, Mittal B. CCR5-Δ32 Polymorphism and Susceptibility to Cervical Cancer: Association with Early Stage of Cervical Cancer. **Oncol Res.** 2008; 17:87-91. (**IF: 4.83**) (**Citation:35**)
- 64. **Singh H,** Jain M, Sachan R, Mittal B. TNF-α (-308G/A) and IL-10(-819C/T) Promoter Polymorphisms and Risk of Cervical Cancer. **Int. J Gynecological Cancer** 2009; 19(7):1190-1194. (**IF: 4.661**) (**Citation: 62**)
- 65. **Singh H,** Jain M, Mittal B. MMP-7(-181 A/G) Gene Polymorphisms and Risk for Cervical Cancer. **Gynecol Oncol.** 2008; 110:71-5. (**IF: 5.482**) (**Citation: 49**) **Book chapter:2**
- Sumitra Nain, Garima Mathur, Pragati Karana, HariOm Singh. Physical and Chemical Properties
  of Nanobiomaterials. Pharmaceutical Technology (Nanobiomaterials
  Applications in Drug Delivery) Apple Academic Press. Mar, 2017.
- HariOm Singh#, Antony Jenitha A, Amita Verma, Anchal Singh. Role of Matrix metalloproteinases (MMPs) and Tissue inhibitor of metalloproteinases (TIMPs) genes in NeuroHIV. Neuropsychiatric complications in HIV. Accepted March 31
- Anchal Singh, Sunil Kumar, HO Singh and Malay Kumar Saha. The neurobiology of HIV. "Neuropsychiatric complications of HIV" 2024, 1st edition Academic Press, USA, 978-0-12-818851-4

### Gene sequence

Jagtap, D.D., Gupte, D.S., Thakar, M.R., **Singh, H.O**., Pandey, S., C, S.K. and Paranjape, R.S. Molecular characterization of tetherin/BST-2 gene promoter in Indian HIV infected long term non progressors. **GenBank-2014** 

### Number of Papers presented in conference/Proceedings: 2

- 1) Goldi Namdev, Ranjana Choudhari, **#HariOm Singh**. Influence of Apolipoprotein E polymorphism and its expression in HIV patients with dyslipidemia on PIs, presented in Conference of Indian Society of Human Genetics, 21st to 24th January 2024 at Ahmedabad, India
- 2) Shyamveer, Ranjana Choudhari, #HariOm Singh. Impact of MTP -493G/T and ABCG2 34G/A Polymorphisms and its expression on PI-treated HIV patients with dyslipidemia, presented in conference of Indian Society of Human Genetics, 21st to 24th January 2024 at Ahmedabad, India